

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for a first communication device to performing authenticated distance measurement between said first communication device and a second communication device, wherein the first and the second communication device share a common secret and ~~said common secret is used for performing the distance measurement between said first and said second communication device;~~

wherein the authenticated distance measurement comprises:

transmitting a first signal from the first communication device to the second communication device at a first time t1, said second communication device being adapted for

receiving said first signal.

generating a second signal by modifying the received first signal according to the common secret, and

transmitting the second signal to the first communication device;

receiving the second signal at a second time t2;

generating by the first communication device a third signal by modifying the first signal according to the common secret;

comparing the third signal with the received second signal to check if the second signal has been modified according to the common secret; and

determining the distance between the first and the second communication device according to a time difference between t1 and t2.

2. (Cancelled)

3. (Currently amended) A method according to claim 2~~1~~, wherein the first signal is a spread spectrum signal.

4. (Cancelled)

5. (Currently amended) A method according to any of the claims 21, wherein the first signal and the common secret are bit words and where the second signal comprises information being generated by performing an XOR between the bit words.

6. (Currently amended) A method according to any of the claims 1, wherein the common secret has been shared before performing the distance measurement, the sharing being performed by the steps of, comprises:

performing an authentication check from the first communication device on the second communication device, by checking whether said second communication device is compliant with a set of predefined compliance rules,

if the second communication device is compliant, sharing said common secret by transmitting said secret to the second communication device.

7. (Original) A method according to claim 6, wherein the authentication check further comprises checking if the identification of the second device is compliant with an expected identification.

8. (Currently amended) A method of determining whether data stored on a first communication device are to be accessed by a second communication device, the method comprising the step of

performing an authenticated distance measurement between the first third communication device and the second communication device, wherein the third and the second communication device share a common secret, and

wherein the authenticated distance measurement comprises:

transmitting a first signal from the third communication device to the second communication device at a first time t1, said second communication device being adapted for

receiving said first signal,

generating a second signal by modifying the received first signal

according to the common secret, and

transmitting the second signal to the third device;

receiving the second signal at a second time t_2 ;
generating by the third communication device a third signal by modifying the first signal according to the common secret;
comparing the third signal with the received second signal to check if the second signal has been modified according to the common secret; and
determining the distance between the third and the second communication device according to a time difference between t_1 and t_2 ; and
checking whether said measured distance is within a predefined distance interval;
wherein the distance measurement is an authenticated distance measurement according to claim 1.

9. (Original) A method according to claim 8, wherein the data stored on the first device are sent to the second device if it is determined that the data stored on the first device are to be accessed by the second device.

10. (Currently amended) A method of ~~determining whether data stored on a first communication device is to be accessed by a second communication device, the method comprising the step of performing a distance measurement between a third communication device and the second communication device and checking whether said measured distance is within a predefined distance interval, wherein the distance measurement is an authenticated distance measurement according to claim 1~~ according to claim 8, wherein the first communication device comprises the third communication device.

11. (Currently amended) A communication device for performing authenticated distance measurement to a second communication device, where the communication device shares a common secret with the second communication device and where the communication device comprises means for measuring the distance to the second device using said common secret; wherein the device comprises:
means for transmitting a first signal to a second communication device at a first time t_1 ;
said second communication device being adapted for receiving said first signal, generating a

second signal by modifying the received first signal according to the common secret and transmitting the second signal;

means for receiving the second signal at a second time t_2 ;

means for generating by the first communication device a third signal by modifying the first signal according to the common secret;

means for comparing the third signal with the received second signal to check if the second signal has been modified according to the common secret,

means for determining the distance between the first and the second communication device according to a time difference between t_1 and t_2 .

12. (Cancelled)

13. (Currently amended) ~~An apparatus for playing back multimedia content comprising~~
aThe communication device according to claim 11, further comprising means for playing back
multimedia content based on a result of the authenticated distance measurement.